Virginia

# Standards of Learning
# Guided Practice Suggestions

**For use with the Grade 5 Science Practice Items in TestNav™ 8**

**March, 2016**

# Table of Contents

Change Log ..... 2
Introduction to TestNav™ 8 Document ..... 3
Guided Practice Suggestions ..... 3
Grade 5 Science Practice Item Information and Recommended Guided Practice Suggestions ..... 4

## Change Log

Updates to this document will be reflected in the table.

| Change Log | | |
|---|---|---|
| **Version** | **Date** | **Description** |
| V.1 | 03/30/2016 | Original Document Posted. |

## Introduction to TestNav™ 8 Document

The *Introduction to TestNav 8* document serves as an introduction to the new online navigation, online tools, accessibility features, and overall functionality and appearance of TestNav 8. It is highly recommended that teachers (or other adults) read the *Introduction to TestNav 8* document prior to reading this guide, the *Guided Practice Suggestions* for the Grade 5 Science practice item set.

Reading the *Introduction to TestNav 8* document will give teachers an understanding of the features of TestNav 8 prior to working with students. In part, the document provides information on-

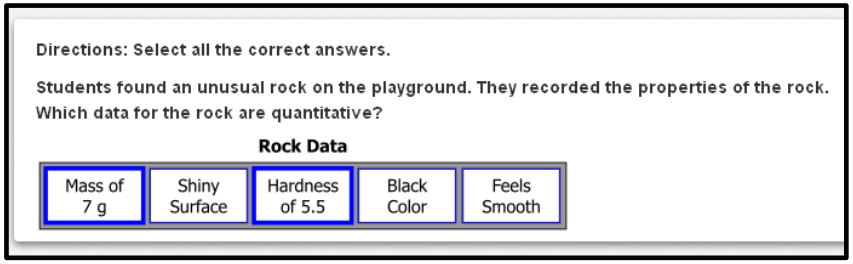
- opening the practice item sets within the required TestNav 8 Application,
- navigating through the practice item sets;
- answering technology-enhanced items (TEI) and multiple-choice items;
- using the online tools, and
- using the accessibility features available in TestNav 8.

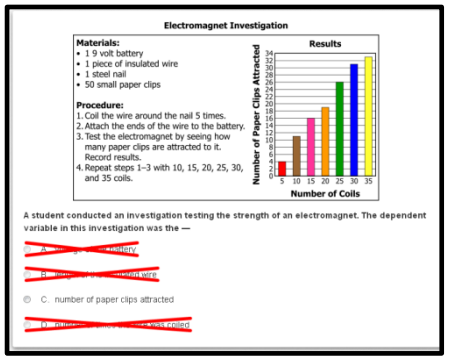
This important information should be used in conjunction with the information found in this guide.

## Guided Practice Suggestions

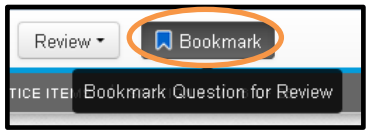
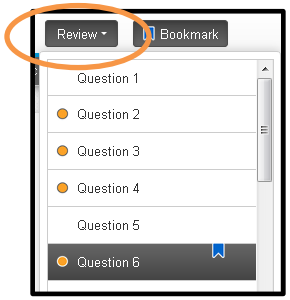
This guide provides specific item information (item type, SOL, and answer) for each question in the Grade 5 Science practice item set, in table format. Along with the item information in the table, there is a column titled "Guided Practice Suggestions." This column contains information for teachers as they guide students through the practice items. For instance, guided practice suggestions can state, "Use the eliminator tool to place a red 'X' on the answers that are not correct," or, "Make sure students know how to select draggers and place them in the empty boxes using their mouse, keypad, or touch screen." Following the suggestions in the table will ensure that students are exposed to all of the different tools within TestNav 8, the different functionality features of TEI, and common messages that may appear as students complete TEI.

## Grade 5 Science Practice Item Information and Recommended Guided Practice Suggestions

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 1 | TEI<br>Hot Spot | 4S.1B | Both of these answers, and only these answers, should be selected: Mass of $7g$; Hardness of 5.5 | This is a type of hot spot technology-enhanced item. To answer this question correctly, all correct answers in the gray box must be selected. A blue box outlines the answer choice when it is selected, indicating a student has chosen that response as an answer. In order to deselect an answer and remove the blue box, the answer choice must be selected again. Have students practice selecting and deselecting an answer.<br>  <br>Tell students that when there are an unspecified number of answers, the question will be considered “Answered” when one answer has been selected. This is so no clue or hint is given as to how many answers are correct.<br><br>Throughout the practice item set, move to the next or previous screen in a section by selecting an arrow in the top left corner of the screen. A blue arrow indicates the button is active and can be selected.<br> |

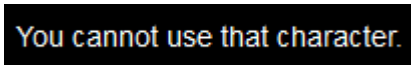
| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 2 | MC | 4S.1F | C | Have students select the eliminator tool located in the toolbar and then place a red “X” on the answers that are not correct<br> <br>To remove an “X” keep the eliminator tool active and select the “X” to remove it. Have students practice removing an “X.”<br>  <br><br>Tell students:<br>Multiple-choice items must be answered in TestNav 8 by selecting the letter of the answer option or the option itself using the mouse, keypad, or touch screen. On multiple-choice items, once an answer is selected, the item cannot be returned to an unanswered state (no answer selected) unless the student uses the eliminator tool to place an “X” over the selected answer and then deselects the “X”.<br><br>Remind students that placing an “X” on the incorrect answer choices does not complete the item. A selection must be made with the cursor tool in order for the item to be considered “Answered.” |

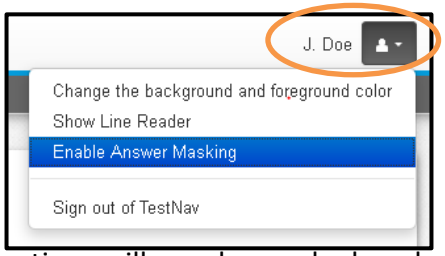
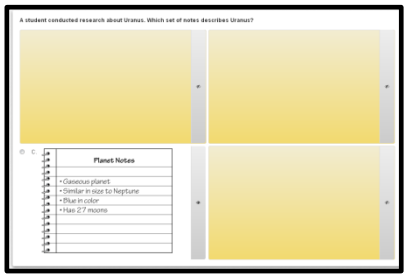
| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 3 | TEI<br>Bar Graph | 4S.1K | All bars must be at the correct height: Fleece 60; Flannel 45; Silk 30; Cotton 35 | Have students practice dragging each bar to the desired height.<br><br>Once one bar has been moved, the item will appear as "Answered" even if all of the bars are returned to the original heights. |
| 4 | MC | 4S.2C | B | |
| 5 | TEI<br>Hot Spot | 4S.2D | All three answers and only these answers must be selected: Bird #2, Student #2, and Student #3 | Tell students that this item does not specify the number of answers so the question will be considered "Answered" when one answer has been selected. This is so no clue or hint is given as to how many answers are correct. |

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 6 | MC | 4S.3A | B | Have students select the *Bookmark* button and tell them that when they select the *Bookmark* button, it will turn dark gray. This button would be used to mark a question for review at a later time.<br>  <br>Then have students select the *Review* button. A drop-down menu will appear. All of the questions in the current section will be listed. The question that the student is viewing on the screen will be shaded dark gray. This question has an orange circle next to it because it has not yet been answered. This question will also have a blue flag next to it because it was just bookmarked.<br>  <br>Have students practice using the scroll bar to see the status of each question in the drop-down menu.<br><br>Have students close the *Review* drop-down menu and deselect the Bookmark button. Then, tell them to look at the *Review* drop-down menu again to see that the question no longer has a blue flag. |

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 7 | TEI<br>Hot Spot | 4S.3B | All three answers, and only these answers, must be selected: B; D; E | Tell students that this item does not specify the number of answers so the question will be considered "Answered" when one answer has been selected. This is so no clue or hint is given as to how many answers are correct. |
| 8 | TEI<br>Hot Spot | 4S.4B | All three answers, and only these answers must be selected: Fern; Moss; Mushroom | Tell students that this item does not specify the number of answers so the question will be considered "Answered" when one answer has been selected. This is so no clue or hint is given as to how many answers are correct. |

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 9 | MC | 4S.5B | C | Have students practice zooming in to look at the models on the screen, and then have them zoom out.<br><br>On a PC or Chromebook, press the CTRL and + keys at the same time to zoom in. Press the CTRL and – keys at the same time to zoom out. Press the CTRL and 0 keys at the same time to return to the default screen size.<br><br>On a Mac, press the CMD and + keys at the same time to zoom in. Press the CMD and – keys at the same time to zoom out. Press the CMD and 0 keys at the same time to return to the default screen size.<br><br>On a touch screen, touch two points on the screen, and then move your fingers away from each other to zoom in. Touch two points on the screen, and then move your fingers toward each other to zoom out.<br><br>As students are practicing how to zoom in and out, make sure they are doing so within reason. If students zoom in too far, they may not be able to see all of the information necessary to answer the question. It should also be noted that zooming in and out on the screen may cause the text wrapping to change. Remind students that they should only use this feature when necessary. |

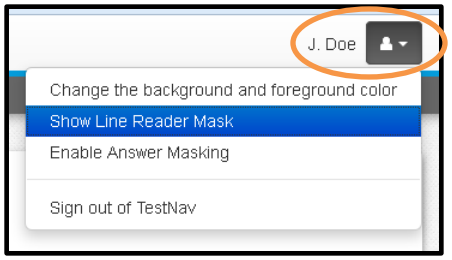
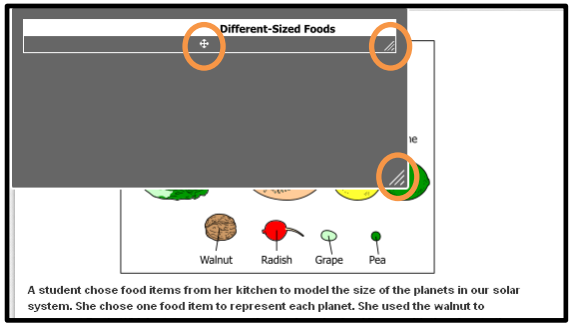
| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 10 | TEI<br>Fill-in-the-blank | 4S.5D | 3 | Have students attempt to enter a character that cannot be used as part of the answer. A message will appear that states:<br>  <br><br>This message will remain on the screen for approximately three seconds.<br><br>Tell students that the answer does not need to be as long as the response box. Make sure students understand that a blank space is not an allowable character, so a blank space can never be entered into a response box. |

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 11 | MC | 4S.7A | C | Have students practice using the Answer Masking accessibility feature with this item. Select the user drop-down menu in the top right corner of the screen and select *Enable Answer Masking* from the menu.<br>  <br>The answer options will now be masked as shown in the screenshot.<br> <br>Students may show or hide each option by selecting the "eye."<br>  <br>Answer Masking will remain on in each multiple-choice item until it is turned off. To turn off Answer Masking, select the user drop-down menu and select *Disable Answer Masking*. |

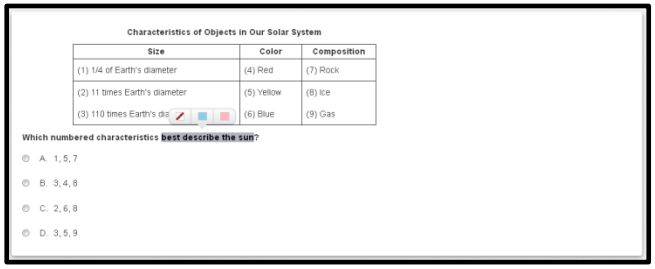


To turn off Answer Masking, select the user drop-down menu and

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 12 | TEI<br>Drag and Drop | 4S.7B | All answers must be placed in the correct order starting at the top rightmost box: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune | Have students select draggers and place them in the empty boxes using the mouse, keypad, or touch screen.<br><br>Selecting a dragger and moving it to an empty box causes the remaining draggers to shift location in the answer option area.<br><br>Have students practice moving draggers back to the gray box. Draggers will go back to their original location when returned to the gray box.<br><br>Tell students that This item will not be considered “Answered” until each box has an answer in it. |

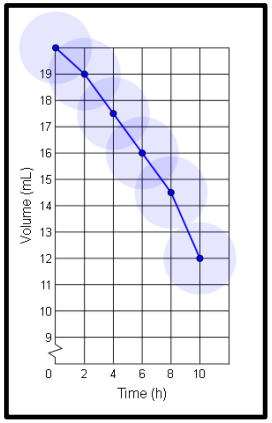
| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 13 | MC | 4S.7C | C | Students may have to zoom out or scroll to see the entire question.<br><br>Have students practice using the Line Reader Mask accessibility feature with this item. Select the user drop-down menu and *Show Line Reader Mask* from the menu.<br>  <br>The Line Reader Mask will appear over the item. Have students use the diagonal line areas to practice resizing the area covered by the line reader and the window through which content can be seen. Have students use the cross to move just the window through which content can be seen. Hold down on any part of the gray area and drag the tool to move the entire tool.<br>  |

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 13 (Cont.) | | | | To turn off the Line Reader Mask, select the drop-down menu and select *Hide Line Reader Mask*. If the student does not turn off the Line Reader Mask, it will automatically turn off when the student navigates away from the item. |
| 14 | TEI<br>Drag and Drop | 4S.8C | All answers must be placed in the correct locations:<br>Box 1: Waning Crescent<br>Box 2: Full Moon<br>Box 3: Waxing Gibbous | Tell students that all of the boxes must contain an answer for this question to be considered "Answered." |

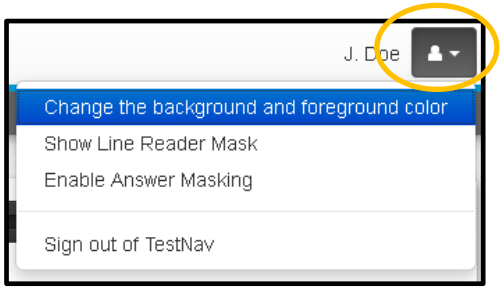
| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 15 | MC | 4S.8D | D | Have students use the highlighter tool to highlight the words "best describe the sun."<br><br>To highlight using a keyboard, place the cursor next to the words, "best describe the sun," left click, hold down, and drag over the text. Then select the highlighter color.* To remove the highlight, left click, hold down, and drag over "best describe the sun." Then select the white box on the left with the red line.<br><br>On a touch screen, hold down on the words "best describe the sun" with a finger, and adjust the area to be highlighted with the blue anchors. Then select the highlighter color.* To remove the highlight, hold down on the highlighted words with a finger, then select the white box on the left with the red line.<br><br>  <br>Characteristics of Objects in Our Solar System<br>Size / Color / Composition<br>(1) 1/4 of Earth's diameter / (4) Red / (7) Rock<br>(2) 11 times Earth's diameter / (5) Yellow / (8) Ice<br>(3) 110 times Earth's dia / (6) Blue / (9) Gas<br>Which numbered characteristics best describe the sun?<br>A. 1, 5, 7<br>B. 3, 4, 8<br>C. 2, 6, 8<br>D. 3, 5, 9<br><br>*Pink and blue are the two highlighter colors available when the foreground and background settings are set to the default (black text on white background). These colors may change when the foreground and background setting is changed. Practice with changing the foreground and background colors will be done on question 26 in this practice item set.<br><br>Tell students that the highlighter tool will only work on text. It will not work on art (images/pictures). |

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 16 | TEI<br>Drag and Drop | 5S.1A | Top row, from left to right: Birch and Magnolia; Second row, from left to right: Sweetgum and Redbud | This question does not require the use of the ruler tool, but have students practice measuring the width and height of the table using the centimeter ruler. This provides them the opportunity to practice manipulating the tool.<br><br>There are two ruler tools on the top of the screen ( ). The icon on the left should be used to access the inch ruler and the icon on the right should be used to access the centimeter ruler.<br><br>Have students select the centimeter ruler for this measurement. To move the ruler, select and drag the ruler over to the object to be measured. To rotate the ruler, select and drag an end with the circle. Have students practice moving and rotating the ruler. Selecting the ruler tool icon again will put the ruler tool away; or, select the pointer tool to put it away.<br><br>The height of the table is approximately 6.8 cm.<br><br>Tells students that each box under a leaf must contain an answer for this question to be considered "Answered." In order to be correct, all of the leaves must be labeled correctly. |

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 17 | TEI<br>Drag and Drop | 5S.1E | In the box labeled Independent Variable: Amount of Sugar;<br>in the box labeled Dependent Variable: Dough Height; and<br>in the box labeled Held Constant: Amount of Flour, Amount of Yeast, and Amount of Water, in any order | All of the boxes must contain an answer for this question to be considered "Answered." Remind students that the answers must be placed in the correct column. Column three (Held Constant) has three answers. The order in which the answers are placed into the third column does not matter. |

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 18 | TEI<br>Line Graph | 5S.1G | Points must be plotted at only these locations:<br>$(0, 20.0)$<br>$(2, 10.0)$<br>$(4, 17.5)$<br>$(6, 16.0)$<br>$(8, 14.5)$<br>$(10, 12.0)$ | Have students plot the data in the table to complete the line graph. Students can use the mouse, keypad, or a finger on a touch screen to select (plot) the points. Each plotted point will be blue with a light blue circular glow around it. The line segments connecting the points are also blue. To remove a point, select it again.<br>  <br>Tell students that this item will be considered "Answered" as soon as one point is plotted. This is so a hint or clue is not provided on how to plot the data in the table. |
| 19 | MC | 5S.2A | B | |
| 20 | TEI<br>Hot Spot | 5S.2B | All three answers must be selected: 1 in the glasses picture; 2 in the instruments picture; 1 in the hand bells picture | This is an example of a hot spot technology item where the number of answers is specified in the question. The question asks the student to select one object from each picture. Therefore, this question will be considered "Answered" once the student has chosen three answers. |

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 21 | MC | 5S.3C | A | |
| 22 | TEI<br>Drag and Drop | 5S.3C | From left to right: transparent; opaque; translucent | All of the boxes must contain an answer for this question to be considered “Answered.” |
| 23 | MC | 5S.4C | B | |
| 24 | TEI<br>Hot Spot | 5S.5B | All of these answers, and only these answers must be selected: Grasshopper; Snail; Crab; Octopus; Spider | Remind students that this is a hot spot technology-enhanced item and the number of correct responses is not indicated in the directions or in the question; therefore, the item will be considered “Answered” once the student selects one answer. |
| 25 | TEI<br>Drag and Drop | 5S.6B | Box 1: Continental Shelf; Box 2: Continental Slope; Box 3: Continental Rise; and Box 4: Trench | Tell students that all of the boxes must contain an answer for this question to be considered “Answered.” |

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 26 | MC | 5S.7B | D | Have students practice with the accessibility feature that allows them to change the background and foreground color. Select the user drop-down menu and *Change the background and foreground color* from the menu.<br>  <br>There are six different options other than black on white, which is the default setting. Have students select a contrast setting and then the *Continue* button to enable this feature. This feature could be used by students who would benefit from the use of color contrasting to make text more distinct.<br><br>This setting will remain enabled until turned off. To turn off this setting, select the user drop-down menu, select *Change the background and foreground color,* and then select the radial button next to the default setting. Then select the *Continue* button. |

| Question | Item Type | SOL | Answer Key | Guided Practice Suggestions |
|---|---|---|---|---|
| 26 (Cont.) | | | | There is not a question in the practice item set that requires the use of a calculator. However, after reviewing the last question (question 26), have students practice using the online calculator so they are familiar with how to select and use it, if needed during an actual SOL test.<br><br>Have students practice using the online calculator by selecting the calculator icon.<br> <br>Once selected, the calculator will appear on the screen. Students can move the calculator across the screen by holding down inside the top of the calculator and dragging it to a new location.<br><br>Make sure students familiarize themselves with knowing how to select and use the calculator if needed.<br> <br><br>Selecting the calculator icon again will put the tool away; or, select the pointer tool to put the calculator away.<br><br>Information for Teachers:<br>This is the end of the practice item set. See pages 25-26 of the *Introduction to TestNav 8* document for information on closing TestNav. |